



SUPERIOR TRAILS, SEGMENT F

TOWN OF SUPERIOR, COLORADO

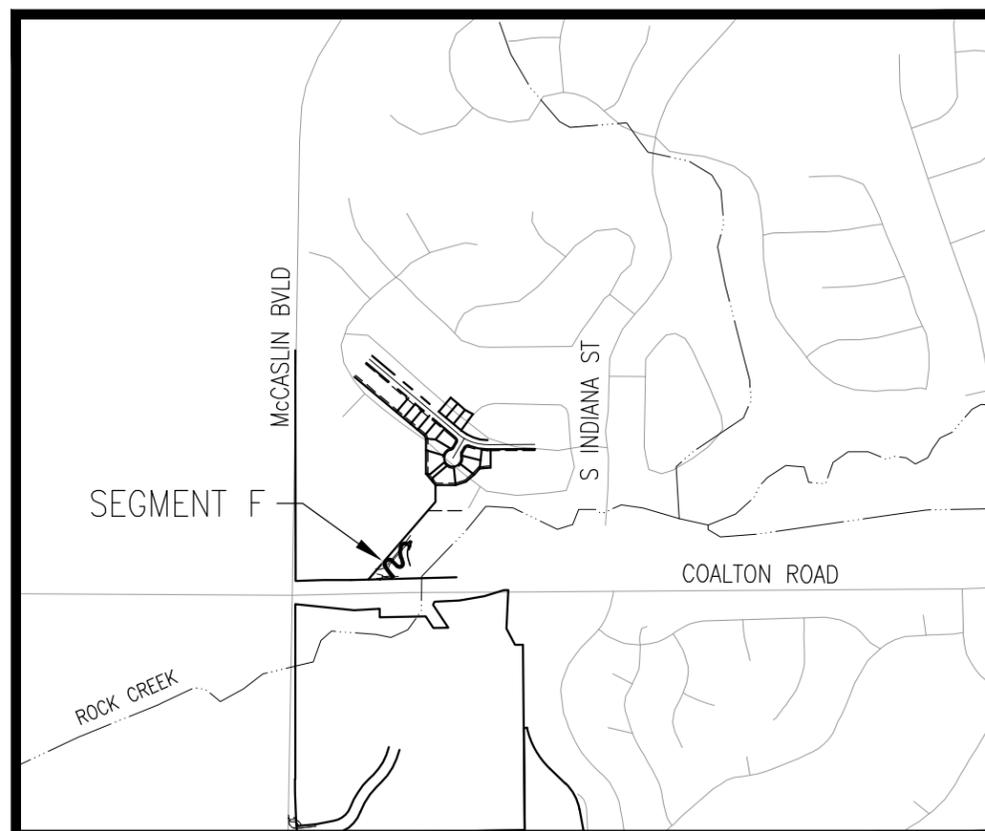
PROJECT CONTACTS

OWNER

TOWN OF SUPERIOR
PATRICK HAMMER
127 E. COAL CREEK DRIVE
SUPERIOR, COLORADO 80027
P. (303) 499-1723

CIVIL ENGINEER

LORIS & ASSOCIATES
SCOTT BELONGER, P.E.
100 SUPERIOR PLAZA WAY
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VICINITY MAP

SCALE 1" = 1000'



INDEX OF SHEETS

SHEET NO	DRAWING NO	DESCRIPTION
1	TT-01	TITLE SHEET
2	GN-01	GENERAL NOTES
3	PP-01	PLAN AND PROFILE, TYPICAL DETAIL
4	EC-01	EROSION CONTROL PLAN

G:\7.2 Clients\328 - Town of Superior\16116 - Superior Trails\50 DWG\16116-(01) Title Sheet (Seg F).dwg Oct 19, 2016 - 4:36pm

Print Date: Oct 19, 2016	Sheet Revisions			<p>Loris and Associates, Inc. 100 Superior Plaza Way Suite 220 Superior, Colorado 80027 303.444.2073 www.LorisandAssociates.com</p>		As Constructed		SUPERIOR TRAILS TITLE SHEET		Project No./Code
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UTILITIES:

- U1. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 105.10 OF THE CDOT STANDARD SPECIFICATION CONCERNING UTILITIES. FOR UTILITY LOCATES, THE CONTRACTOR SHALL CALL THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 AT LEAST TWO (2) WORKING DAYS (NOT INCLUDING THE INITIAL DAY OF CONTACT) PRIOR TO DIGGING, GRADING OR EXCAVATING.
- U2. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS HOWEVER THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCY. ALL CONFLICTING UTILITIES SHALL BE EXPOSED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND INSPECTED BY THE ENGINEER TO VERIFY CONFORMANCE WITH THE PLANS. THIS PARTICULARLY APPLIES TO UNDERGROUND WORK TO BE COMPLETED ON THIS PROJECT BY THE CONTRACTOR. RELOCATION OF EXISTING UTILITIES IS NOT A PART OF THIS CONTRACT EXCEPT AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF UTILITY RELOCATIONS BY UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITIES DURING CONSTRUCTION AND SHALL HOLD BOULDER COUNTY HARMLESS FOR DAMAGES ARISING FROM CONTRACTOR'S FAILURE TO ADEQUATELY PROTECT EXISTING UTILITIES.
- U3. THE CONTRACTOR SHALL REFERENCE THE PROJECT TECHNICAL SPECIFICATIONS FOR ADDITIONAL ITEMS THE CONTRACTOR SHALL ADHERE TO IN COOPERATION WITH UTILITIES.

PERMITS:

- E1. CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS TO COMPLETE CONSTRUCTION. THIS INCLUDES BUT NOT LIMITED TO TOWN OF SUPERIOR STORMWATER PERMIT AND TOWN OF SUPERIOR RIGHT-OF-WAY PERMIT.

CONSTRUCTION:

- C1. DETAILED TRAIL ALIGNMENT MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD. CONTRACTOR SHALL OBTAIN FORMAL APPROVAL OF THE PROJECT MANAGER PRIOR TO THE PLACEMENT OF THE TRAIL.
- C2. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE OWNER. THIS SHALL INCLUDE REMOVAL OF ANY DEBRIS CAUSED BY FLOODING.
- C3. LIMITS OF CONSTRUCTION SHALL BE CONFINED TO PUBLIC RIGHTS-OF-WAY, EASEMENTS, CONSTRUCTION LIMIT AREAS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
- C4. REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS, IRRIGATION, ACCESS POINTS OR LANDSCAPING IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL ACCESS ROUTES SHALL BE RETURNED TO PRECONSTRUCTION CONDITION UPON COMPLETION OF THE PROJECT. ALL ASSOCIATED COSTS FOR REPAIR SHALL BE PAID FOR BY THE CONTRACTOR, AT NO EXPENSE TO BOULDER COUNTY.
- C5. THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION.
- C6. THE CONTRACTOR SHALL HAVE: ONE (1) COPY OF THE PLANS, ONE (1) COPY OF THE CONSTRUCTION SPECIFICATIONS ON THE PROJECT SITE.
- C7. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPES AS SHOWN ON THE PLANS AND CROSS-SECTIONS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS. THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR STAGING OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS.
- C8. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH IMPACTED UTILITIES TO ASSURE THE TIMELY RELOCATION OF THEIR FACILITIES. THIS COORDINATION SHALL INCLUDE ANTICIPATED IMPACTED UTILITIES AND UNFORESEEN UTILITIES.
- C9. THE CONCRETE FOR THIS PROJECT SHALL BE CLASS B/D, 4500 PSI.

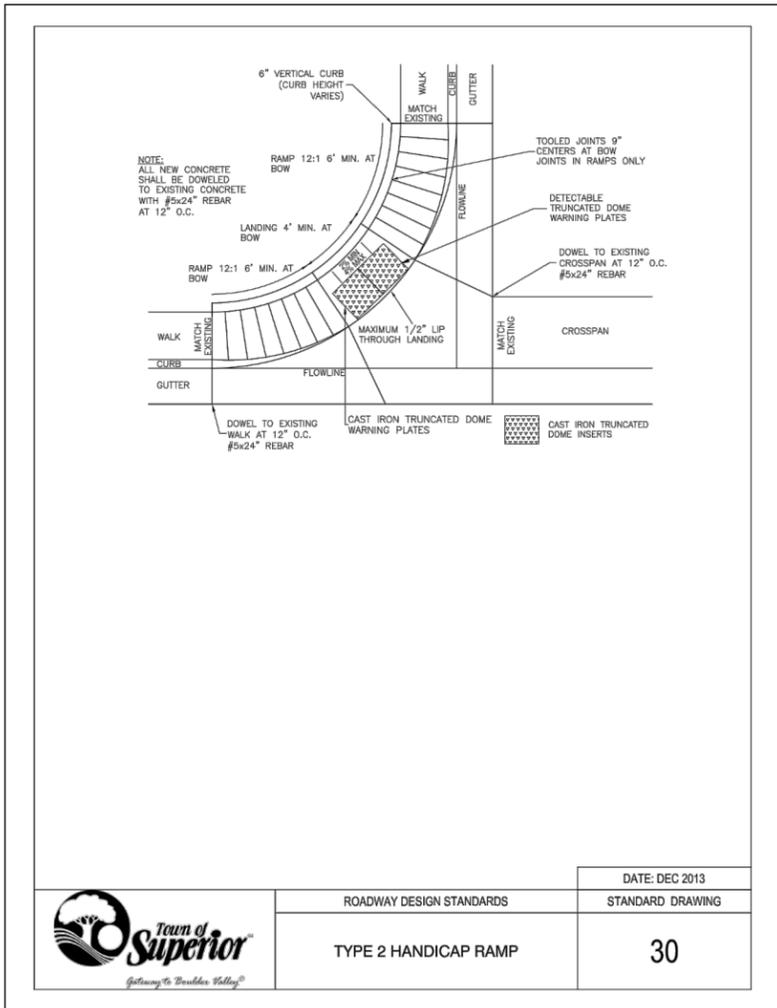
EARTHWORK:

- E1. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED AND WILL NOT BE PAID FOR SEPARATELY.
- E2. PRIOR TO MOISTURE DENSITY CONTROL, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SOFT OR DISTURBED SOILS. DEPTH OF MOISTURE - DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:
FULL DEPTH OF ALL EMBANKMENTS
BASES OF CUTS AND FILLS - 8 INCHES
- E3. EXCAVATION REQUIRED FOR COMPACTION OF BASES OF CUTS AND FILLS WILL BE CONSIDERED AS SUBSIDIARY TO THAT OPERATION AND WILL NOT BE PAID FOR SEPARATELY.
- E4. THE TYPE OF COMPACTION FOR EARTHWORK ON THIS PROJECT SHALL BE AASHTO T-99. PROCESS 12 INCHES OF EXISTING SUBGRADE, COMPACT TO MINIMUM 95% MAXIMUM DRY DENSITY AT 0%+2% OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-99. PROOF ROLLING OF ALL SUBGRADE WILL BE REQUIRED PRIOR TO CONCRETE BIKEWAY PLACEMENT AND SHALL BE INCLUDED IN COST OF THE WORK. PROOF-ROLL SUBGRADE BELOW THE CONCRETE AND PAVEMENTS WITH A PNEUMATIC-TIRED AND LOADED 10-WHEEL, TANDEM-AXLE DUMP TRUCK OR WATER TRUCK WEIGHING NOT LESS THAN 18 KIPS PER AXLE TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES.
- E5. FINAL GRADES SHOWN REFLECT A MINIMUM OF SIX(6) INCHES OF TOPSOIL BEING PLACED ON ALL DISTURBED AREAS NOT SURFACED. TOPSOIL TO BE USED IS SUBJECT TO REVIEW AND APPROVAL BY THE PROJECT ENGINEER.
- E6. ALL ON AND OFF-SITE MATERIAL USED ON THIS PROJECT SHALL HAVE A MINIMUM R VALUE OF 20, AND IS SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO ITS INCORPORATION INTO THE PROJECT. ALL BORROW MATERIAL IMPORTED TO THE SITE SHALL MEET THE RESILIENT MODULUS CRITERIA IN ITS NATURAL STATE - NO MIXING SHALL BE ALLOWED. THE CHANNEL EXCAVATIONS ARE NOT SUITABLE FOR EMBANKMENT ON THIS PROJECT.

SEEDING:

- S1. SOIL PREPARATION, SOIL CONDITIONING OR TOPSOIL, SEEDING (NATIVE), MULCHING (WEED FREE) AND MULCH TACKIFIER WILL BE REQUIRED FOR AN ESTIMATED 0.34 ACRES OF DISTURBED AREA WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT SURFACED. THE FOLLOWING TYPES AND RATES SHALL BE USED:

SEED MIX			
Common Name	Botanical Name	% OF TOTAL	Pounds PLS/Acre
WESTERN WHEATGRASS	ACROPYRON SMITHII VAR. ARRIBA	28%	3.0
BIG BLUESTERN	ANDROPOGON GERARDII VAR. PAWNEE	28%	6.2
SIDE-OATS GRAMA	BOUTELOUA CURTIPENDULA VAR. EL RENO	10%	2.2
BLUE GRAMA	BOUTELOUA GRACILIS VAR. LOVINGTON	6%	1.2
SWITCHGRASS	PANICUM VIRGATUM VAR. PATHFINDER	10%	2.2
INDIANGRASS	SORGHASTRUM NUTANS VAR. CHEYENNE	10%	2.2
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUS VAR. CIMARON	8%	1.8
TOTAL		100%	22 LBS/ACRE



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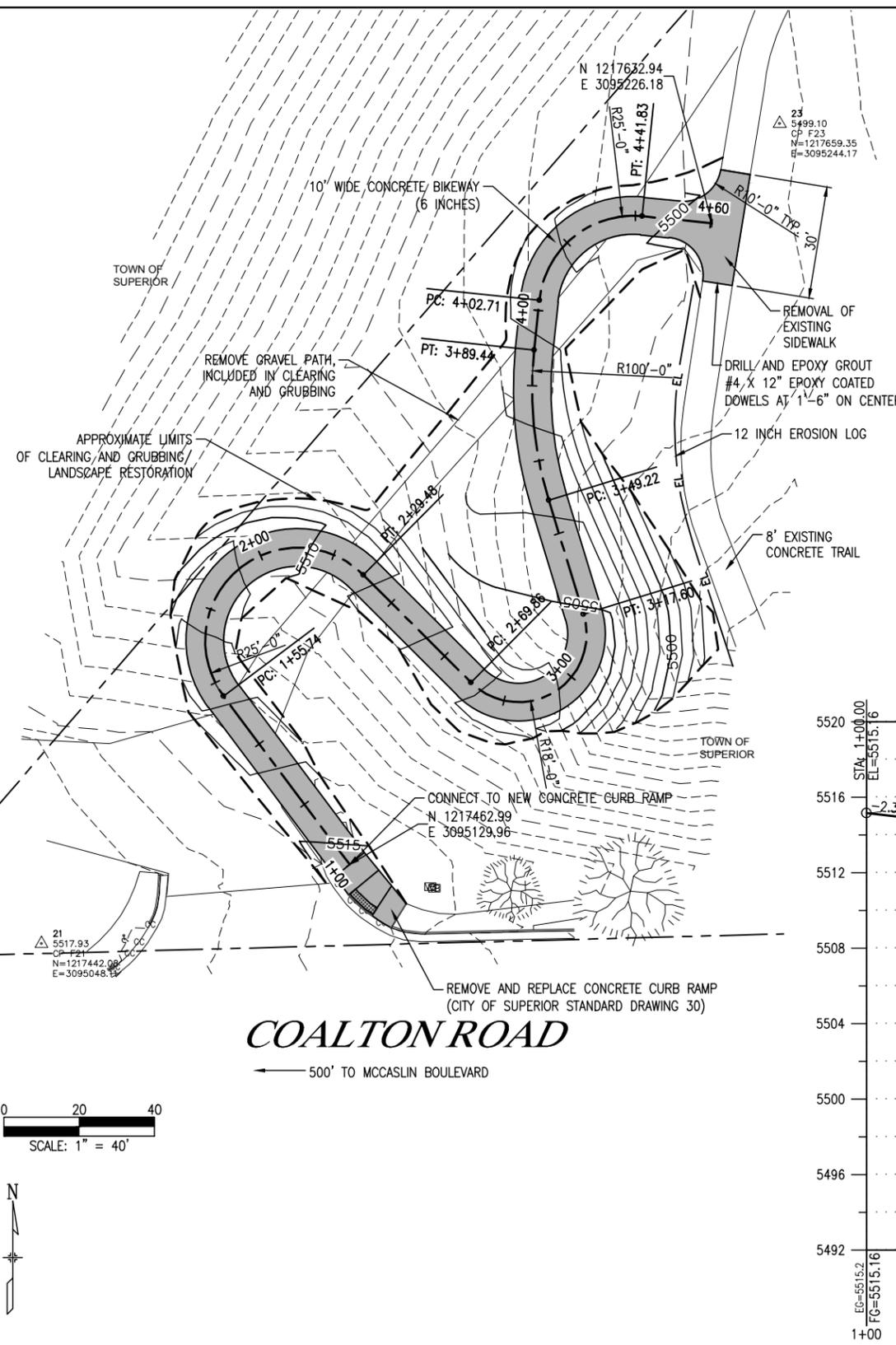


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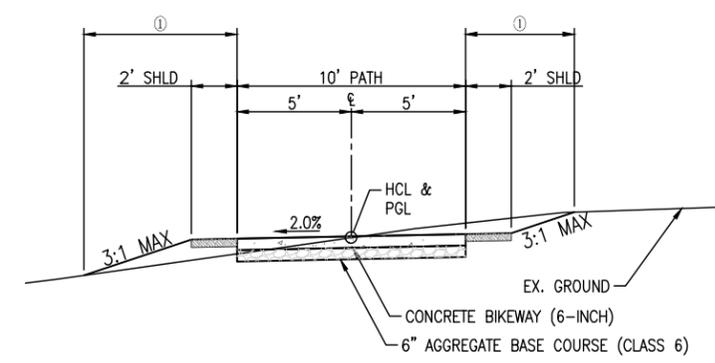
SUPERIOR TRAILS NOTES (SEGMENT F)	
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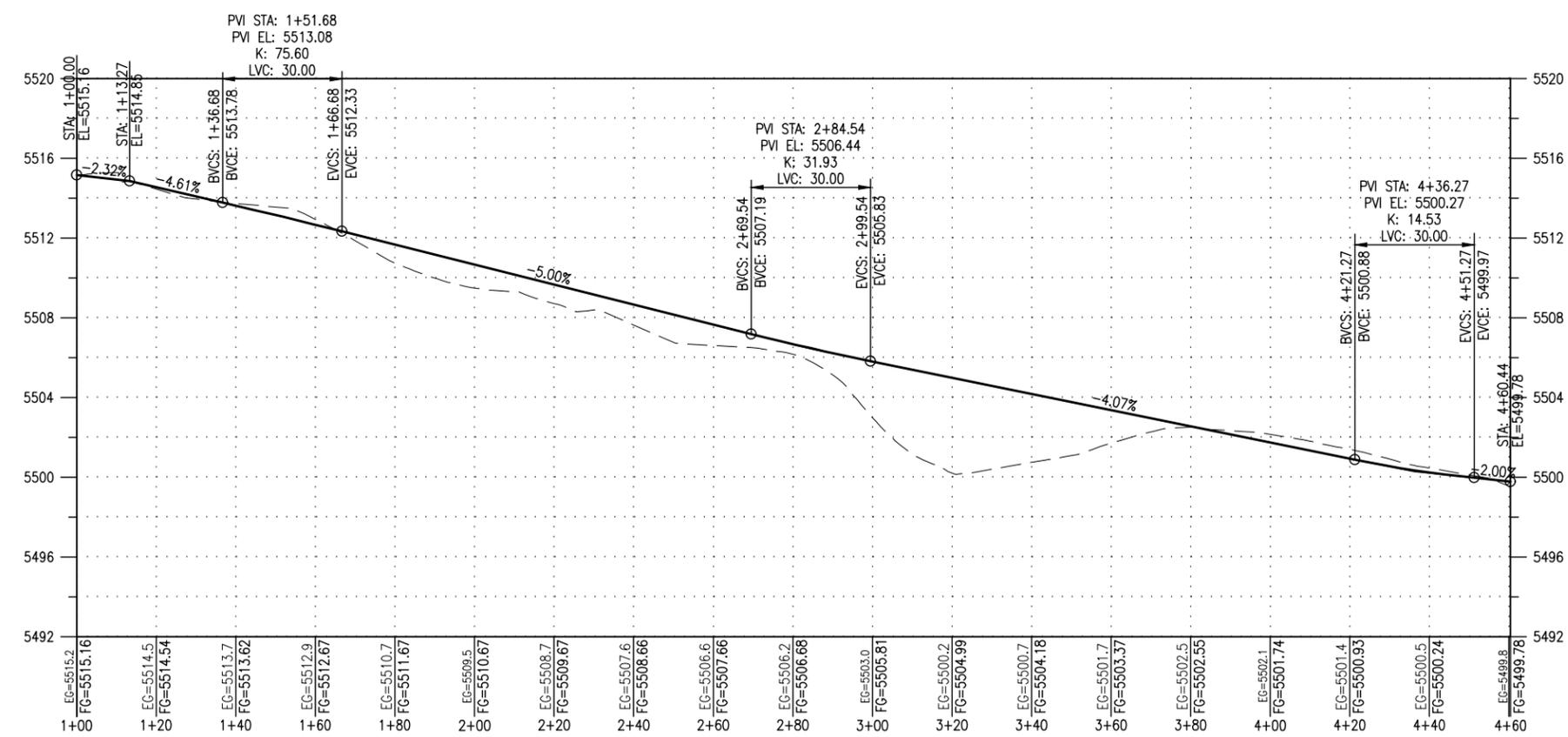


SUMMARY OF QUANTITIES				
CONTRACT ITEM NO.	CONTRACT ITEM DESCRIPTION	UNIT	TRAIL	TOTAL
201-001	CLEARING AND GRUBBING	AC	0.3	0.3
202-200	REMOVAL OF SIDEWALK	SY	26	26
202-203	REMOVAL OF CONCRETE CURB RAMP	SY	15	15
203-060	EMBANKMENT MATERIAL (COMPLETE IN PLACE)	CY	250	250
208-002	EROSION LOG (12 INCH)	LF	105	105
212-1200	LANDSCAPE RESTORATION	LS	1	1
304-6007	AGGREGATE BASE COURSE (CLASS 6)	CY	282	282
608-010	CONCRETE CURB RAMP	SY	12	12
608-026	CONCRETE BIKEWAY (6 INCH)	SY	405	405



① LANDSCAPE RESTORATION SHALL INCLUDE STRIPPING, STOCKPILING AND PLACEMENT OF 6" OF TOPSIOL, SEEDING (NATIVE), AND MULCHING.

SUMMARY OF APPROXIMATE EARTHWORK QUANTITIES	
EMBANKMENT MATERIAL (COMPLETE IN PLACE)	328 CY
UNCLASSIFIED EXCAVATION	78 CY
NET IMPORT	250 CY



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SUPERIOR TRAILS
PLAN & PROFILE, TYPICAL DETAIL (SEGMENT F)
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Project No./Code
 Sheet Number **3**



NOTES:

1. ALL BMP DEVICES SHALL BE INSTALLED PER CDOT M-208 AND MAINTAINED PER CDOT STANDARDS & SPECIFICATIONS.
2. EXISTING TREES SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE. IF TREES ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE THE TREES AT NO ADDITIONAL COST TO THE PROJECT. CONSTRUCTION SHALL BE LIMITED TO CITY OWNED PROPERTY OR RIGHT-OF-WAY.

MATERIALS HANDLING AND SPILL PREVENTION

1. ANY MATERIAL STOCKPILES SHALL BE LOCATED AWAY FROM SENSITIVE AREAS (AS DEFINED BY THE PROJECT MANAGER) AND CONFINED SO THAT NO MATERIAL OR THEIR RUN-OFF WILL ENTER STATE WATERS. LOCATIONS SHALL BE APPROVED BY THE ENGINEER IN CONSULTATION WITH TOWN OF SUPERIOR.
2. CONTAIN AND CLEANUP EQUIPMENT FUEL, OIL, AND LUBRICANT LEAKS.
3. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND ANY OTHER CHEMICALS SHALL HAVE SECONDARY CONTAINMENT OR EQUIVALENT ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS.
4. CONTRACTOR SHALL INSPECT AND CERTIFY EQUIPMENT AND VEHICLES DAILY TO ENSURE PETROLEUM, OILS, AND LUBRICANTS (POL) ARE NOT LEAKING ONTO THE SOIL OR PAVEMENT. ABSORBENT MATERIAL OR CONTAINERS APPROVED BY THE ENGINEER SHALL BE USED TO PREVENT LEAKING POL FROM REACHING THE SOIL OR PAVEMENT. CONTRACTOR SHALL HAVE READY APPROVED ABSORBENT MATERIAL OR CONTAINERS OF SUFFICIENT CAPACITY TO CONTAIN ANY POL LEAK THAT CAN REASONABLY BE FORESEEN. ALL MATERIALS RESULTING FROM POL LEAKAGE CONTROL AND CLEANUP SHALL BE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE SITE. THE COST FOR CONTROL AND CLEANUP OF POL LEAKS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE WORK.

STOCKPILE MANAGEMENT

1. SILT FENCE, BERMS OR OTHER SEDIMENT CONTROL DEVICES SHALL BE PLACED AT THE TOE (OR JUST BEYOND TOE) OF ALL ERODIBLE STOCKPILES (INCLUDING TOPSOIL). SEDIMENT CONTROL OR STOCKPILES WILL NOT BE PAID FOR SEPARATELY.
2. THERE SHALL BE NO STOCKPILING OR SIDE CASTING OF WASTE MATERIALS INCLUDING BUT NOT LIMITED TO PAINT CHIPS, ASPHALT, AND CONCRETE ADJACENT TO ANY STATE WATERS.

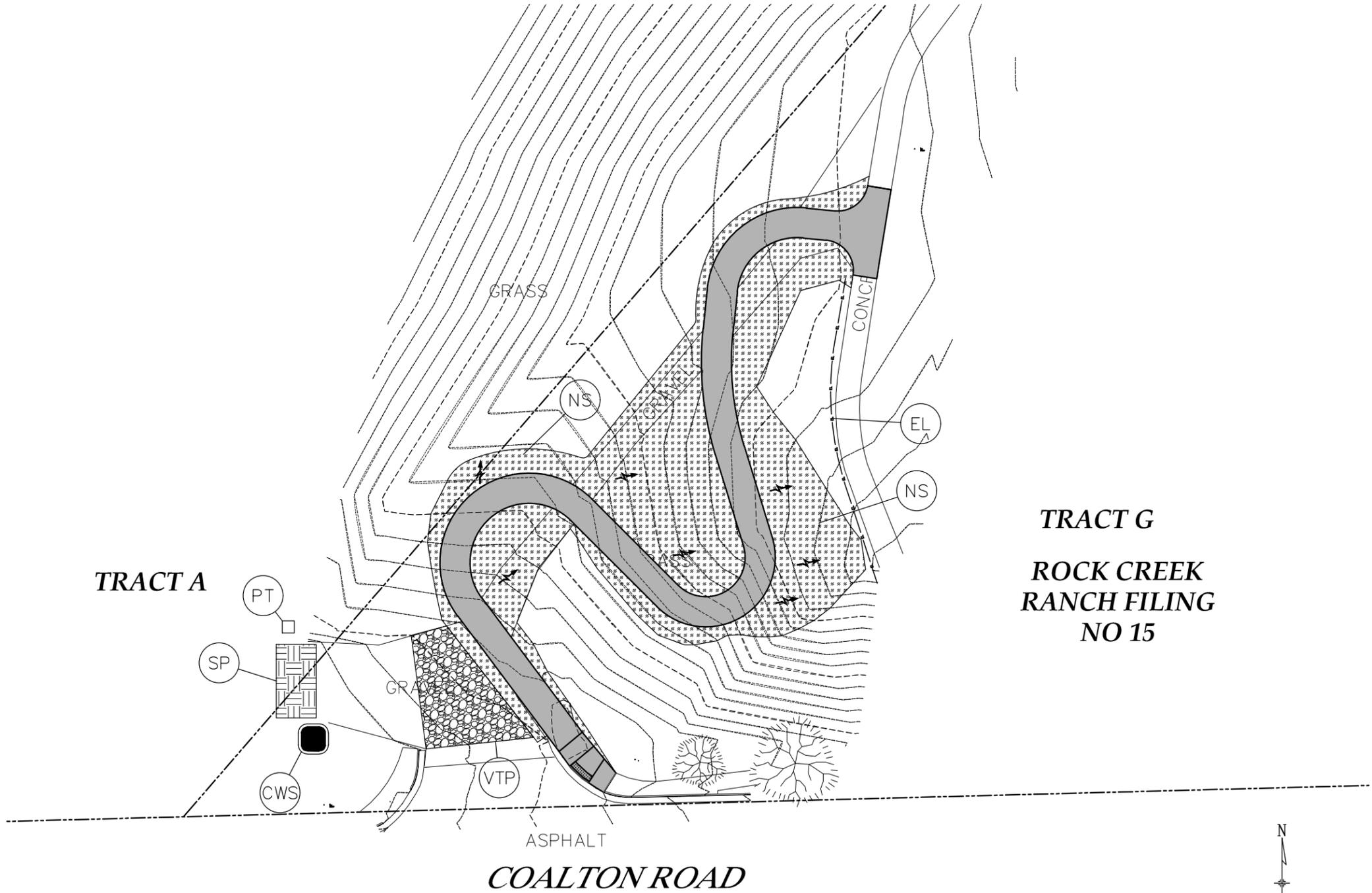
STREET CLEANING

1. WHENEVER SEDIMENT IS TRANSPORTED ONTO THE ADJACENT ROADWAY, THE ROAD SHALL BE CLEANED AS NEEDED. STORM DRAIN INLET PROTECTION SHALL BE IN PLACE PRIOR TO SHOVELING, SWEEPING, OR VACUUMING. STREET CLEANING WILL NOT BE PAID FOR SEPARATELY.

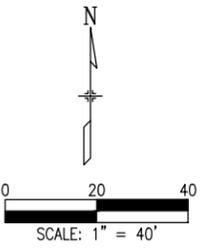
LEGEND

(CWS)	CONCRETE WASHOUT STRUCTURE*	
(EV)	EXISTING VEGETATION	
(NS)	SEEDING (NATIVE)	
(PT)	SANITARY FACILITY*	
(EL)	EROSION LOG (12-INCH)	
(SP)	STOCKPILE LOCATION	
(VTP)	VEHICLE TRACKING PAD*	
	DIRECTION OF OVERLAND FLOW	

*WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.



**TRACT G
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